(10.)

POPULATION QUESTION

AT THE

Medical Society of London;

OR,

THE MORTALITY OF THE RICH AND POOR.

A PAPER READ AT THE SOCIETY, WITH THE DEBATE.

EDITED BY

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"Little improvement can be expected in morality until the production of large families is regarded in the same light as drunkenness, or any other physical excess."—John Stuart Mill.

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The Population Question at the Medical Society of London.

A PAPER was read at the Medical Society of London, on October 27th, 1879, Dr. Cockle, Physician to the Royal Free Hospital, in the chair, by Charles R. Drysdale, M.D.; F.R.C.S. Lond.; M.R.C.P.; Senior Physician to the Metropolitan Free Hospital of London, on the "Mortality of the Rich and Poor."

Dr. C. R. Drysdale said: It has for many years past appeared to me, during my period of office as Medical Officer of various charities of London, that an immense amount of the sickness and mortality of the poorest classes is almost entirely due to the unfortunate position in which many of them are placed with regard to the acquisition of food, shelter, clothing, and other requisites of healthy existence in a northern climate.

I have no doubt that the same observation has been very frequently made by all medical enquirers who have seen much of the poorer classes; but, in my opinion, there has, up to this time, been too little of accurate statistical information collected in order to enable us to see clearly what I am now inclined to believe, that the poverty caused by low wages is by far the most important cause of premature death, and the

main obstacle to all sanitary improvements.

It is doubtless quite true that, during the past three or four centuries, a very great advance has been made in lowering the death-rate in European States, an assertion which will be amply verified when it is known that in the town of Geneva, the probability of life, *i.e.*, the age to which half of the population born lived, in the 16th century, did not exceed five years, whilst the mean of life was only $18\frac{1}{2}$ years. In the 18th century these figures had risen to $27\frac{1}{2}$ years for the probability of life, whilst the mean of life had advanced to $32\frac{1}{5}$ years.

England has had a similar history, and a rapid fall in the death-rate during the earlier decades of this century; but it must be noted that for the last thirty or forty years there has been no very perceptible fall in the mortality. And this is in the face of the fact that, at no previous period in the history of the nation, has there been such an amount of capital, labour, and intelligence expended on the drainage and purification of our cities.

Let me take London as a sample. With all the advances recently made in this most wonderfully healthy city, we find that the death-rate was 22·2 per 1,000 in 1856, 22·3 in 1876, and about 23 per 1,000 in 1877 (Vacher): and, if we turn to all England, we see, as Dr. Fergus pointed out at the Cork Meeting of the British Medical Association, that the death-rate of England and Wales was identically the same, namely, 22·35 per 1,000 in each of the decades 1841-50, 1851-60, and 1861-70.

The point that I shall endeavour to insist upon and elucidate is, that the grand cause of the non-improvement of our mortality resides in the mass of indigence, which is now, as it always must have been, the main cause of premature death in all settled and civilised States. M. Villermé, the distinguished Parisian physician, and several of his able collaborateurs in the Annales d'Hygiene Publique, have contributed some valuable facts to this argument. Thus, in France, it has been found that persons between the ages of 40 and 45 die, when in easy circumstances, in the proportion of 8.3 per 1,000, whilst, if poor, they die at the rate of 18.7, that is, $2\frac{1}{2}$ times as many poor as rich die at these ages. It was found, too, that at Paris, there died, between the years 1817 and 1836, one inhabitant in 15 in the 12th arrondissement, which is that peopled chiefly by the poor, whilst only one death in 65 took place in the 2nd arrondissement, chiefly inhabited by the rich.

M. Joseph Garnier mentions that, in 1857, the mean life of certain quarters in Manchester was only 17 years, whilst that of other quarters of that city was then 42 years. Dr. Villermé found, some 30 years ago, that the probable life of an infant of a weaver in Mulhouse was as low as $1\frac{1}{2}$ years, whilst that of

the infant of the manufacturing classes was 26.

The venerable Mr. Edwin Chadwick, late Chief Officer of the First General Board of Health in England, gave me, in Paris, last summer, a pamphlet of his, written in 1877, "On the Dwellings of the Wage Classes," marking for me the following passage, which will illustrate my point: "A death-rate which is a mean of the death-rates of the whole population, is almost invariably a pernicious misrepresentation. Thus, we have part of a sub-district in London, comprising houses in good condition, where the death-rate does not exceed 11·3 in 1,000 whilst there are adjacent dwellings within the same sub-district where the death-rates rise to the extent of 38 in 1,000 from year to year. A mean of the two is a misrepresentation of the conditions of both. It is now reported that there are particular localities in London where the death-rates are from year to year upwards of 50 per 1,000."

He then refers to an important return made by the Sanitary Commission in the Metropolis, in 1843, in which year the general death-rate was 24 per 1,000, which reads thus: "A study of the common form of return of the proportion of deaths to the living of all classes, will show how little useful information was to be got from it, in comparison with the return, for the same year subjoined.

	Proportion per cent, of deaths from Epidemics to total deaths of each class.	deaths of children of dram of 1 year to births within the year.	Proportion per cent. of deaths of children under 10 years to total deaths of each class.	Mean age at death of all who have died men, women, and children.	Mean age of all who have died over 21.
Gentry, Professionalists, and their families	6.5	1 to 10	24.7	44	61
their families	20.6	1 to 6	50·4 54·5	23	50 49

These important statistics may seem almost sufficient to prove my point, that the indigence caused by low wages is the grand cause of early death; but the more recent data assembled by Mr. Charles Ansell, junior, and published by him in 1874, are, to my mind, still more trenchant, seeing that they are accom-

panied by so many interesting details.

Mr. Charles Ansell, junior, in his capacity as Actuary of the National Assurance Company, went, some years ago, through the immense labour of obtaining information through circulars sent out from his office concerning no less than 48,044 children of the well-to-do classes in England and Wales, including members of the legal, clerical, and medical professions, and the nobility and gentry. In 1874 he published his remarkable work entitled "Statistics of Families of the Upper and Professional Classes," from which I will now make a few extracts bearing upon my thesis.

Mr. Ansell points out that it results from his figures that, in the first year of life, only 80·45 per 1,000 deaths occur among the children of the richer classes in England. In the Registrar General's Report it is shown that about 150 per 1,000 die in the general population of England in the first year of life, and we find that the rate rises to 188 per 1,000 in the whole of Liverpool, so that it can be easily understood that the Sanitary Commission's account of the death-rate among the families of the wage fund classes is in London 250 per 1,000 in first infancy, and that, in some cities, the death-rate among the children of the indigent rises to 330 per 1,000, and even, as

is the case in Berlin, and other cities in Germany, where the birth-rate exceeds 40 per 1,000, to 50 per 1,000 of all born in the first year of life (Stille). Mr. Ansell next shows that, from one till five there are 46.84 deaths per 1,000 among the children of the richer classes in this country, as against 113.69

in the general population.

Of 100,000 births, Mr. Ansell's tables show, among the richer classes, 80,000 survivors at the age of 21, as against 65,750 among the general public. His tables also show that between the ages of 20 and 40 there die, in the richer classes, 125.52 per 1000, as against 124.17 among the general public; and between 40 and 60, the figures for the richer classes are 147.74, and for the general public 168.76 per thousand.

The mean age at death among the richer classes, in Ansell's tables, appears to be, in England and Wales, at present 55 years, an estimate which is a good deal higher than that already quoted from the Sanitary Commission of 1843—namely, 44. His tables also show that of 100,000 children born among the well-to-do, 53,398 survive at the age of 60, whilst, in

Farr's tables, only 36,983 attained to that age.

One statement of Mr. Ansell's, which I noted when his work first appeared, shows the supreme importance of being born of parents in comfortable circumstances. It seems that, in the year 1873, there died, in England and Wales, 368,179 persons under the age of 60; and Ansell calculated that, if the mortality among the general population had been only what it was in the upper classes, 226,040 only would have died. So that, in one year, poverty destroyed 142,130 lives

in England and Wales alone.

A remarkable confirmation of this calculation of Mr. Ansell's has quite recently been afforded from the official statistics of New Zealand. The wages of labour and profits of capital have been for some years so high in that country, whilst the price of butcher's meat (which, in spite of Dr. Richardson's late speech at Croydon, I still venture to consider one of the prime requisites of civilized nutrition) has been only some threepence a pound, and wheat has been about three shillings a bushel, that the most unskilled labourer has been enabled to secure an ample supply of food, clothing, and shelter for self and family.

Hence, New Zealand, at this moment, with a very high birth-rate of 41 per 1,000, has the almost incredibly low death-rate of $12\frac{1}{2}$ per 1,000. This, of course, is mainly due to the absence of any indigent or badly-fed class in that colony.

^{* 36} to 48 shillings a week for ordinary agricultural labourers.

Had England and Wales that death-rate, some 230,000 lives would annually be saved.

In passing, I think these figures may, perhaps, show those persons who believe that alcohol is the great cause of death and most of the evils in this country, that they are rather exaggerating an otherwise important truth. It is probable that the New Zealand labourer partakes of as much, or even more, of this so-called luxury at the Antipodes as he did when at home, and yet he lives nearly twice as long there as he would in this country.

The greatest British writer on Logic, of this day, Mr. Alexander Bain, in an able Essay on the Constituents of Happiness, has the following remark, which the statistics just cited verify: "That prime requisite of happiness, health, is very imperfectly secured in the lowest grades even of respectable citizenship. The public registers have demonstrated that mortality and disease diminish with every rise in the scale of wealth."

M. D'Espine remarks, in the Annales d'Hygèene, that the socalled mortality of several trades is only another name for poverty; and Dr. Thouvenin, in an article on the Influence of Trades on Health, arrives at the conclusion that, with the exception of cotton-beating, dividing and carding of silk cocoons, or white lead grinding, and one or two other trades, industrial pursuits do not exercise any directly injurious effects on the work-people's health. He traces the deterioration of the health of the wage classes in towns, and their greater deathrate, to defects in their dwellings, to hereditary and skin diseases, to venereal and tubercular complaints, to the excess of their premature labour and the scanty nature and bad quality of their diet, the irregularity of their lives whilst still immature, and, lastly, to drunkenness.

The summary of these causes is but another way of naming poverty: and D'Espine shows also, what my own experience for many years in the North London Consumption Hospital had led me to recognise, that, whilst tubercular diseases form 68 per 1,000 of all deaths among the richer classes, no less than 230 per 1,000 of the poor die of those diseases so often caused by mal-nutrition in early youth. Rickets, too, according to Sir W. Jenner, prevail especially among the children of the poor who have large families, and who feed their

children so badly.

With regard, too, to phthisis, the late Dr. Edward Smith, whose untimely death was such a loss to hygienic science, put a number of questions to 1,000 of his patients affected with consumption, and found that the number of children given birth to by the parents was actually 7.5 on an average.

It can readily be conceived how the ill-feeding in infancy of the unfortunate children of these parents had developed the want of stamina which culminated in phthisis. That eminent observer also threw a flood of light over the way in which poverty causes premature death, in an Essay in the Sixth Report of the Medical Officers of the Privy Council for 1863. In an article "On the Food of the Labouring Classes," Edward Smith stated, as the result of his laborious enquiries, that the food of the workers in silk was found by him to cost, per head, only 2s. 2d. a week; that of the needlewomen, 2s. 7d.; that of stocking weavers, 2s. $6\frac{1}{2}$ d.; and of kid glovers, 2s. $7\frac{1}{2}$ d. He sums up by saying: "No class under enquiry exhibited a high degree of health. The least healthy are the kid glovers, needlewomen, and Spitalfields' weavers. The average amount of food was too little for health and strength." I am glad to see that some most able members of the profession are commencing to speak of this point. Thus, at the Cork Meeting of the British Medical Association, this year, Dr. Rabagliati, of Bradford, is reported as having said: "It was common to hear of large families, of whom nearly all, or more than half, died in infancy. Among the poorer classes, especially, this was generally the case. Instances of it came before him every day."

Poverty, then, I trust I have sufficiently proved by these figures, is the main cause of premature death in old countries such as those of Europe. If, then, we wish to lower the deathrate in any notable degree in this country, I submit that we must no longer content ourselves with drainage schemes, or charitable schemes for building model lodging-houses for a few who are to live in them with the assistance of the rate-payers. I presume that all who are penetrated, as I am, with the weight of these figures, will at once frankly admit that, in order to permanently lower the death-rate, we must endeavour to find out how to lessen indigence, which meets us face to face at every turn, even in our wealthiest cities. How this is to be accomplished is not my task at present. Suffice it to say, that the diagnosis of the disease has been long made. The cause of poverty has long been

known.

The real cause of the difference in the remuneration for labour and in the cost of butcher's meat and wheat in this country and new colonies, resides solely in the much diminished pressure on the powers of agriculture in the new colony. If, then, it were possible for us to lessen the birth-rate of 36 per 1,000 of this country down to the rate of France, 26 per 1,000, whilst our present emigration continued for a time, the price of meat and wheat would rapidly sink, and might eventually become as low

here as it is in our most flourishing colonies. Our death-rate would then rapidly fall: and might in the end be as low as 12 per 1,000, which Mr. Chadwick says is already the annual death-

rate of the well-to-do classes in this country.

with.

My argument is, then, as Sir Henry Thompson expresses it, that our farm is overstocked with human animals, and that this is the only real cause of the permanent death-rate in our cities above mentioned: and I contend that, so long as the people of Great Britain continue to add to the population in the ratio of 362,923 persons, as was done in 1877, or to have an annual birth-rate of 36 per 1,000, it is useless to expect anything from drainage schemes or the other expedients of public hygiene. Slums will always exist as long as people have such low wages that they cannot afford house-room enough for the over-numerous offspring they engender, a species of improvidence so conspicuous as yet among the poorer classes in the United Kingdom.

In almost all countries, the fecundity of the poorer classes is very much greater than that of the richer. In Paris, for instance, according to the Statistics of European Population, the births are one-32nd of the population in the rich quarter, whilst in the poor quarter they rise to one-26th. The poorer classes being less educated are less prudent and more instinctive, and consequently are cut off by what in modern scientific parlance has been styled "the struggle for existence," a struggle which, however interesting it may be for philosophers to contemplate among other races of animals, I humbly submit is contrary to all the instincts of the medical art and of true morality to rest content

Mr. Van Houten, in a work on this subject, mentions that in Holland there are two divisions where the mortality of children differs very widely. In South Holland (Rotterdam and its vicinity, and Zealand) there is a high death-rate in the first year of life of 316 per 1,000 born. In that part of Holland the birth-rate is very high, i.e., families are very large. In Groningen, again, where families are very much smaller, the infantile death-rate falls to 134 per 1,000. (Bijdragen tot d strijd, p. 96.) And in the quarters of Paris and other French cities where the deathrate is lowest the birth-rate is very low. For instance, I found in 1878, when Vice-President at Paris of the International Congress of Hygiene, that of 61 medical men of the highest reputation at Paris, Bordeaux and Laon, in France, only 109 children had been born, i.e., not two to a family. This is the rule among the wellto-do people in France, and naturally the mortality among such carefully nurtured children was very low. I conclude, then, that the only way to lower the death-rates in old States like this is to slacken the birth-rate until such time as butcher meat and wheat become as cheap here as in the most fertile of our colonies.

After the conclusion of the paper, the President observed that Dr. Drysdale had read a most interesting essay on a most interesting subject. He now invited the Fellows of the Society to discuss it.

Dr. Routh, physician to the Samaritan Hospital for Women, said he quite agreed with Dr. Drysdale's figures, which proved poverty to be the cause of early death: but indigence was not the main cause, it was the habits of the poorer classes which caused their greater death-rate. There was, he said, no country where the working classes were more despicable than in this. In his whole professional life, for instance, he never had received a farthing from any member of that class. They habitually ate up and drank all their gains. Many workmen who made thirty shillings a week only brought back a part of it to their families and consumed a great part in the public-house. Then the man would join a union, and henceforward would work as little as he possibly could. The accursed principles inculcated in their trades' unions were the bane of industry. No matter how able a workman might be, he was compelled to receive the same remuneration for his labour as the most unskilful. It was found, by a charitable set of persons in Manchester, that when they saw that the mother really received the food necessary for the family, the mortality of the children diminished. There were no strikes among the upper classes, and many gentlemen in the room would go on at their professional business for fifteen hours in the day. Think of a working man doing that! Such men would only work eight hours, and even in the times of strike, the workmen drank. If the same principle were carried out by the professional classes, their lives would be as short as those of the working classes. Then, again, the greatest mortality was amongst the drunkards. The want of cleanliness was one great cause of death. Eating, washing, and sleeping were carried on all in one room, and the poor had no idea of ventilation, so that the air in their rooms smelt horribly. Dr. Drysdale had put down the greater longevity in New Zealand to the better feeding of the people there, but the amount of drink consumed there was inconsiderable, and the climate of England was what was so fatal to children. The death-rate here always rose in cold weather. The mortality among the upper classes in France is certainly lower than among the lower, but the cost of food was higher in Paris than in London. Were they to believe Dr. Drysdale that a slow birth-rate was the grand remedy for indigence, in face of the Registrar-General's often repeated allegations that a rapid birth-rate was the best test of a flourishing country? Was it likely that the death-rate could be reduced by imitating the French and checking the birth of children by voluntary means after

marriage? It was a rule of human nature that God had sent poverty, but that was the result of the want of good habits among the working classes. He (Dr. Routh) was summoned to go one night to attend a poor woman in labour. He found the room quite denuded, and the family without food. The woman had triplets, and had obtained the Queen's Bounty. He gave the family some food, but found that the man was on strike, upon which he said to him: "What would you do if we doctors were also to strike?" The man replied: "Strikes are useful, and you have only to strike to fill your pockets." He considered that any imitation of the French in the matter of checking the birth of children among married persons was contrary to morality.

Mr. PARAMORE said that he thought a large and healthy population was the source of a grand nation. Children embellished a house and could not be too numerous. For his own part, he had remarked that some bright geniuses arose amid scenes of poverty and misery, who would not have been born if their parents had thought of limiting their families. All persons were very glad that they had been born. He was himself, and he dared to say so was Dr. Drysdale. During the past three years he had been favoured with three children, and he was glad to mention it. It was not the number of a family that was the difficulty, but that thousands of parents brought up their children in a way that was contrary to reason and to nature. Thus, there were 150 millions sterling annually spent in drink, and he was surprised that Dr. Drysdale, who had done so much towards opposing alcohol, should not see that drinking was the chief cause of social misery. In conclusion, he thought that medical men should live together in brotherly love, and not try to compete too rudely with each other for business, but remember that they were of a noble profession.

Dr. Crisp disagreed with both Dr. Drysdale and Dr. Routh, that poverty was the cause of early death. In the siege of Paris people lived longer than before. In Surrey, when the labourers had only six or seven shillings a week, they lived better than the poor people in London with much higher wages. They had meat only once a week. In towns, habits were bad, and much drinking abounded, but he did not think that poverty per se was the cause. For instance, publicans and butchers were short-lived.

Dr. Heywood Smith said that a great mortality occurred among the children of the poor, because the children themselves take care of each other. Among those who could afford a nursery maid, the children, being better cared for, escaped. Then, again, the poor often succumbed because they preferred to take their chance of an operation, which, if richer, they would not undergo. Any infirmity to the poor interfered so much with their trade that

they preferred to risk such operations rather than remain incapacitated for work. If many large buildings, such as Peabody's, were erected, they might, by the care given to the children, much lessen the chances of early infantile mortality. He also was of opinion that the idea of limiting, by volition, the number of children, was contrary to ethics. Some other remedy was needed, and, in his opinion, emigration was that remedy. If the State were to organize a great emigration scheme over-crowding might be cured.

Dr. De Haviland Hall wished to make only one observation, and that was that emigration seemed unfit, as a remedy, for poverty, since it withdrew only the most able-bodied and ablest, and

left the weaker at home.

Dr. Woakes said that, if Dr. Routh were right, all we had to do was to let alone, and concern ourselves in no way, with the problems brought forward by Dr. Drysdale. He could not see this at all, but thought that the subject was well worthy of attention. Dr. Routh had said that the remedy proposed was not one that could commend itself to experience; but he (Dr. Woakes) had had some experience of unlimited families. One man he knew had had nearly twenty children, but these were the offspring of four wives. Thus, many women fell victims to over-reproduction of children and continual toil for their offspring when born. Such women, he thought, had a claim to have a voice in the question whether families should be as large as chance would allow them to be. He thought that prudence in this question was highly moral, instead of being immoral, as Dr. Routh would have it.

Mr. Gould said he thought Dr. Drysdale had not gone far enough back when he considered poverty as the main cause of mortality. In large towns this was true, because there poverty implied over-crowding and filth, which the upper classes escaped. There were many other causes of death besides poverty. The living according to the laws of health was the main point in obtaining long life. He was sorry to hear the prevention of large families styled immoral. This means so little and was so vague. It would be very much better to explain in what way the prevention of births was injurious and hurtful to society, than simply to

give it a bad name.

Dr. Rogers said he held very strongly the views of Dr. Routh and Dr. Heywood Smith. He did not think it was unfair to use a strong word when we felt strongly. He had lived for many years in the world, and wished to protest against the idea of limiting families to three or four children. With regard to the question of poverty, it is clearly at the root of the evils mentioned by Dr. Drysdale, and if that gentleman could propose any other remedy than that of small families he would go heartily along with

him. Although not a teetotaller, he yet considered that drinking was the main cause of poverty, as alcohol was not of the least use

in the building up of our tissues.

A Fellow of the Society thought that infantile mortality was mainly due to ignorance in parents, and improper feeding. This was seen very well when it was remembered that in England the poorer classes could not do without bread and bacon, whilst the

Scotch brought up their children well on oatmeal.

Dr. C. R. Drysdale, on being called on to reply, thanked the Society most heartily for the courteous way in which his views had been received and discussed. It was a rather amusing, as well as instructive fact, to find that his chief opponents, Drs. Routh, Heywood Smith, and Rogers were all eminent accoucheurs (laughter), and he supposed that was to be accounted for by assuming that they saw more of the evils resulting from people attempting to keep their families down to the level of their means than other members of the profession. His own statistics seemed clearly to prove that poverty was the main cause of early death, and all those who had studied the matter knew well that it was now axiomatic that the grand cause of low wages and poverty, in old countries in Europe, was over-rapid reproduction, i.e., large families. use was there, then, in Dr. Routh complaining that it was "immoral" to talk of checking that rapid birth-rate which, statistics showed, only led infants to the cemetery. Morality meant that conduct which conduced to health and happiness, and he claimed the right of all rational beings, to base all his arguments on experience or on science (applause), unrestricted by theological prejudices contained in works written two thousand years ago or The experience of the nineteenth century was surely greater than that of the "Juventus Mundi." To Dr. Paramore he would say, as he would to Dr. Routh, that surely the case of Ireland, which, in 1847, contained 81 millions, of whom nearly three had since disappeared by death, emigration, &c., was a proof that mere numbers do not make the wealth of a nation. As M. Verneuil had said, it is quality not quantity we want. Emigration, praised by Dr. H. Smith, was quite inadequate. Population could double, if supplied with food, in twenty years, and how could the 300 millions of Europeans be taken across the Atlantic or Pacific once in twenty years? Dr. Crisp's observations were only true to a very small extent. If the well-todo in country parts were compared with the poor in ill-fed villages, the difference in mortality would be almost as notable as between the two classes in towns. Eventually, all, he believed, would turn to his side, and public opinion would probably end in affixing a stigma to the overcrowding of old countries by large families.

(The speaker concluded amidst a round of applause.)